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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,339	12/15/2003	Rajesh K. Saini	2001-IP-005484U1P1	3700
7590	10/01/2007		EXAMINER	
Robert A. Kent Halliburton Energy Services 2600 S. 2nd Street Duncan, OK 73536			TSOY, ELENA	
			ART UNIT	PAPER NUMBER
			1762	
			MAIL DATE	DELIVERY MODE
			10/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/736,339

Applicant(s)

SAINI ET AL.

Examiner

Elena Tsoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/07</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Amendment filed on September 11, 2007 has been entered. Claims 1-6 and 20-41 have been cancelled. Claims 7-19 are pending in the application.

Election/Restrictions

1. Applicant's election without traverse of claims 7-19 in the reply filed on September 11, 2007 is acknowledged.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Rejection of claims 7-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8-13 of U.S. Patent No. 7,080,688 in view of Ellis et al (US 5604184) has been withdrawn due to proper filed terminal disclaimer.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al (US 6,209,643) in view of Free et al (US 3960736) for the reasons of record set forth in paragraph 4 of the Office Action mailed on 6/15/2007 because the amended claim 7 is broader in scope than original claim 7.

5. Claims 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of Free et al, further in view of Lee et al (US 6,817,414) for the reasons of record set forth in paragraph 4 of the Office Action mailed on 6/15/2007 because the amended claim 7 is broader in scope than original claim 7.

Response to Arguments

6. Applicants' arguments filed September 11, 2007 have been fully considered but they are not persuasive.

A. Claims 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al (US 6,209,643) in view of Free et al (US 3960736)

Applicants assert that the combination of Nguyen and Free does not teach or suggest each element of claims 7 and 14. Nguyen fails to disclose each and every limitation of independent claims 7 and 14. Nguyen teaches particulates that are coated with a "liquid or solution of a

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tackifying compound, which coats at least a portion of the particulate upon admixture therewith." (Nguyen at col. 3, 11. 41-43). However, the "treatment chemical" (e.g., a hydrolyzable ester) actually becomes adhered to the tackifying compound. (See Nguyen at col. 4, 11. 57-60). This does not teach a particulate that is itself coated with a coating solution comprising an acid-releasing degradable material and a solvent or plasticizer, as recited in claims 7 and 14. Nor does Free teach this element. Rather, Free merely teaches that an organic ester which hydrolyzes over a certain time period to release an acid may be used as a breaker of a viscous aqueous solution for the use as a fracturing fluid, as a drilling fluid. (See Free at col. 1, 11. 36-46).

The Examiner respectfully disagrees with this argument. In contrast to Applicants statement, Nguyen teaches at col. 4, 57-60, "The presence of the *tackifying compound* **on the particulate** or substrate material causes the **treatment chemical** containing or coated particles **to adhere to and remain dispersed within the coated particulate both during mixing**, introduction into the formation and upon placement therein. The transported treatment chemicals are not subject to the gravity segregation or premature settling **from the particulate material with which it is introduced**. Thus, the treatment chemicals can be uniformly dispersed in a proppant pack or gravel pack without undesired segregation or settling to enable uniform release of the treatment chemical within the formation". Thus, Nguyen teaches a particulate that is itself coated with an acid-releasing degradable material.

As to claimed solution of an acid-releasing degradable material, Nguyen teaches that a treatment chemical which may be in particulate form or coated upon or in a substrate (See column 3, lines 43-44) such as hydrolyzable esters (See column 4, lines 40-41) that are capable of producing a **pH change** in the fluid (See column 4, lines 40-42). The tackifying compound is

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admixed in a solvent such as alcohol (See column 5, lines 55-56). Free et al teach that an organic ester, which hydrolyzes over a certain period of time to release an acid, such as low molecular weight (C_1 - C_{12}) esters of organic carboxylic acids, may be used as a breaker of a viscous aqueous solution for the use as a fracturing fluid, as a drilling fluid (See column 1, lines 36-46). Note that organic esters are generally *soluble* in a conventional *alcohol solvent* such as methanol and isopropanol. Therefore, a solid particulate organic ester of Nguyen in view of Free et al would *at least partially dissolve* in the conventional *alcohol solvent* forming at least a colloidal *solution* of the organic ester when mixed with a solution of a tackifying compound in an alcohol solvent and particulate material.

B. Claims 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al in view of Free et al, further in view of Lee et al (US 6,817,414)

Applicants assert that the combination of Nguyen and Free fails to disclose each and every limitation of independent claims 7 and 14 for the same reasons as discussed above in Section (A). Nor does Lee teach what the combination of Nguyen and Free lacks.

The Examiner respectfully disagrees with this argument for the same reasons as discussed above in Section (A).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

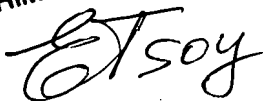
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy, Ph.D.
Primary Examiner
Art Unit 1762

ELENA TSOY
PRIMARY EXAMINER



September 27, 2007